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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,623	04/09/2004	Joachim Bihr	82205	8929

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KRIEGSMAN & KRIEGSMAN
30 TURNPIKE ROAD, SUITE 9
SOUTHBOROUGH, MA 01772

EXAMINER	
NGUYEN, THONG Q	
ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/821,623	BIHR ET AL.	
	Examiner	Art Unit	
	Thong Q. Nguyen	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) *8, 10, 13-40 and 45/(8, 10, 13-40)* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 9, 11-12, 41-44 and 45/(1-6, 9, 11-12, 41-44)* is/are rejected.

7)☒ Claim(s) *7 and 45/7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 April 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/25/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species (I) in the reply filed on 6/26/06 is acknowledged. The traversal is on the ground(s) that there is not a serious burden on the examiner if restriction is not required. This is not found persuasive because the following reasons.

First, it is clear from the species that the structures of the tilting system as shown from the figures contain mutual structural limitations from each other. The arrangement of the lenses which are moved/rotated about the rotational axes and the use of prism for varying the orientation in one species and the absent of such prism in other species would require different searches in class 359, and thus is a serious burden on the examiner if a restriction is not issued.

The requirement is still deemed proper and is therefore made FINAL.

2. It is noted that in the election of 6/26/2006, applicant has stated that the claims readable from the elected species (I) are claims 1-7, 9-13 and 41-45. The Examiner respectfully disagrees. The Examiner is of opinion that the claims readable from the elected species (I) are claims 1-7, 9, 11-12 and 41-45. Claims 10 and 13 recite the positions of the positive and negative lenses with respect to the prisms which is disclosed in the species (II) of figures 4-6 and/or species (III) of figs. 7-9. Thus claims 10 and 13 are not directed to the elected species (I).

As a result, claims 1-7, 9, 11-12, 41-44 and 45/(1-7, 9, 11-12, 41-44) are examined in this Office action. Claims 8, 10, 13, 14-40 and 45/(8, 10, 13, 14-40) have

been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species. Applicant should further note that in case that the generic claim 1 is later found allowable then all claims dependent upon the generic claim 1 will be rejoined by the Examiner.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4. The drawings contains ten sheets of figures 1-14 were received on 4/9/2004. These drawings are objected by the Examiner for the following reasons.

5. The drawings are objected to because of the following reasons:

First, each of figures 1-2, 5, 8, 10 and 11 contains at least one foreign language;

Second, in figure 2, the reference "35" is used to refer to two different elements. Should the reference "35" appeared near the references "12" and "34" be changed to –33--?

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature related to the ocular device as claimed in claim 1 and the observation device having a base body as recited in claim 45 must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

8. The disclosure is objected to because of the following informalities: a) Pages 4-22: The summary of the invention is objected to because it refers to the claims (see page 4) and it contains numerous details of the inventive device. The present summary of the invention longs more than 18 pages. Applicant should provide a brief summary of the invention and provides other details of the inventive device in the section of "Detailed Description of the invention"; b) Page 8: last line of the page, what does the term "PD" mean? c) Page 9: lines 7-8, what does the terms "ad infinitum" mean? d) Page 27: line 21 and line 23, "und" should be changed to –and--; d) Page 27: line 24, "Figure 1" should be changed to –Figure 2--. Applicant should note that figure 2, not figure 1, discloses a box with the numerical reference "45"; e) Page 29: line 19, "Figure 9" should be changed to –Figure 11—because figure 11, not figure 9, discloses prisms "60" and '63". There are still some grammatical and idiomatic errors in the specification.

Applicant should carefully proofread the specification. Appropriate correction is required.

Claim Objections

9. Claims 1-2, 4, 7, 41, 44 and 45 are objected to because of the following informalities. Appropriate correction is required.

a) Claim 1 fails to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

First, the phrase "A tilting system for an observation device, in particular for a microscope" renders the claim indefinite because it is unclear whether the limitations following the terms "an observation device" is part of the claimed invention. See MPEP § 2173.05(d). Should ", in particular for a microscope," (line 1) be deleted.

Second, the feature thereof "the extended position of the tilting system" (line 7) is unclear. What position is 'the extended position" of the tilting system does applicant imply here?

b) Claim 2 is objected to by the recitation thereof "at least one deviating prism is provided in each of the beam paths, upstream and/or downstream of the 180^0 prism" (lines 1-3).

First, the feature "the beam paths" lacks a proper antecedent basis. Applicant should note that the base claim 1 recites "at least one beam path" (claim 1, line 2) does not mean that the system has plural beam paths as claimed in claim 2. Should the terms "each of the beam paths" be changed to –at least one beam path--?

Second, it is unclear how many deviating prism being used in the system by the mentioned recitation. Applicant should note that the use of the terms "at least one deviating prism" (lines 1-2) could be understood as there is one prism and thus it is either being located upstream or downstream of the 180^0 prism. It cannot be located on both upstream and downstream of the 180^0 prism. Should the terms "and/or" be changed to --or--?

c) Claim 4 is objected to because the feature "the deviating prisms" (line 3) lacks a proper antecedent basis. Applicant should note that the base claim 2 recites "at least one deviating prism" (claim 2, lines 1-2) does not mean that the system has plural deviating prisms as claimed in claim 4. Should the terms "the deviating prisms" be changed to –at least one deviating prism--?

d) Claim 7 is objected to for the same reason as set forth in element c) above. Should the terms "the deviating prisms" be changed to –at least one deviating prism--?

e) In each of claims 41 and 44: the term "this" appeared on line 1 of each claim should be changed to –the-- or --said--.

f) Claim 45 is objected to. The phrase "An observation device, in particular a microscope or telescope," renders the claim indefinite because it is unclear whether the limitations following the terms "an observation device" is part of the claimed invention. See MPEP § 2173.05(d). Should the terms ", in particular a microscope or telescope," be deleted?

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2, 42-44, and 45/(1-2, 42-44), as best as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kitajima (U.S. Patent No. 4,652,094).

Kitajima discloses a binocular microscope. The binocular microscope as described in column 2 and shown in figure 1 comprises the following features: An objective lens unit (2) having a tube for supporting an objective lens (9) and a variable magnification lens system (10); a deflecting unit (4) having a housing (16) for supporting a deflecting prism (18); and a pair of binocular eyepiece units (6) which each has a housing (30) for supporting an image forming lens (32), a Porroprism system (34) and an eyepiece lens (36). The light from an object will go through an entrance region in front of the eyepiece units and then go to an exit region wherein an observer/viewer sees the image via the eyepiece lens. Kitajima also discloses a mechanism for fastening the eyepieces units to the defecting unit as can be seen in columns 2-3 and shown in fig. 2. The eyepiece units act as a tilting system. It is noted that the Porroprism system (34) comprises two Porro prisms wherein the first prism disposed behind the image forming lens (32) extended in a horizontal direction or in a crosswise to an extension position of the Porroprism system and the second Porro prism disposed behind the first

Porro prism extended in a vertical direction. Each of the Porro prisms changes the direction of light incident on it by an angle of 180 degrees. The Porroprism system having two Porro prisms tilts and reverses the image provided by the objective lens unit and guides the image to an observer/viewer via the eyepiece lens (36). It is also noted that the second Porro prism disposed behind the first Porro prism acts as a deviating prism and disposed in the light path from the objective lens unit to the eyepiece lenses. Regarding to the base body as recited in present claim 45, it is noted that he present claim does not provided any specific limitation of the base body of the observation device, and it is inherent that the binocular microscope of Kitajima has a base body for supporting the microscope.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 1-6, 9, 11-12, 41, 43-44 and 45/(1-6, 9, 11-12, 41, 43-44), as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanzawa (U.S. Patent No. 5,822,114) in view of Matsubara (U.S. Patent No. 4,643,541).

Hanzawa discloses a stereomicroscope. The stereomicroscope as described in columns 5-6 and shown in figures 4-5 comprises the following features: a tilting system having a first reflecting element (1), a second reflecting element (4), a

third reflecting element (5) and a fourth reflecting element (6), an objective lens (20, a variable magnification lens system (30; and an eyepiece system having lenses (10L-R, 14L-R) and reflecting elements (16L-R, 13L-R). The light from an object will enter an entrance region defined in front of the tilting system will go through the tilting system in two beam paths, i.e., left and right beam paths, in the exit region between the tilting system and the eyepiece system. See figure 4, left and right pupils (7L-R). As such a structure, each left and right light path will pass through the objective lens (2), the zoom lens system 93) and the reflecting elements (1, 4-6). The set of reflecting elements (1, 4, 5, 6) tilts and reverts the image provided by the objective lens (2) and guides that image to the eyepiece unit. It is noted that in column 5, lines 56-59, Hanzawa discloses that the reflecting elements (1, 4-6) function like a Porro prism of Type II, and the first reflecting element (1) is also shown in figure 4 as a mirror oriented an angle of 90 degrees with respect to the light from an object. It is also noted that the arrangement of the reflecting elements (1, 4-6) as disclosed in column 5 and shown in fig. 4 provides that the second and third reflecting elements (4,5) lie in a crosswise or horizontal direction in the extended position of the titling system. The light from the first reflecting element will change by an angle of 180 degrees after reflection by the second (4) and third (5) reflecting elements. Regarding to the rotation of the reflecting elements, in column 6, lines 40-64, Hanzawa discloses that the second, third and fourth reflecting elements are rotated about the light path (O2) and the fourth reflecting element (6) is able to rotate about the

light path (O4) which light paths (O2) and (O4) are perpendicular to the light path from an object go to the first reflecting element (1).

Regarding to the lens structure of the objective lens, Hanzawa discloses that the lens inside the tilting system comprises an objective lens (2) and a zoom lens (3) having a first positive lens disposed in front of the second reflecting element and a negative lens disposed between the third and fourth reflecting elements. While Hanzawa does not explicitly state that the zoom lens system is a component of the whole objective lens; however, it would have been obvious to one skilled in the art to rearrange or rename the set of lenses into an objective lens. Applicant should note that the arrangement of the lenses as disclosed in the inventive device is identical to the arrangement of the lenses provided by Hanzawa.

The tilting system as provided by Hanzawa as stated meets all of the features recited in the present claims 1-6, 9, 11-12, 41 and 43 except that he does not explicitly state that the second and third reflecting elements can combine into a single unit. However, the use of an image reverted system having reflecting elements and lenses wherein the second and third reflecting elements are combined into a single Porro prism is known to one skilled in the art as can be seen in the microscope provided by Matsubara. In particular, Matsubara discloses a tilting system having reflecting elements (2, 3, 4, 5) and lenses (L1-L3) wherein the second and third reflecting elements are combined into a single Porro prism (3) and the single Porro prism element (3) is able to rotate about a rotational axis. See column 2 and figs 1-2. Matsubara also disclose a

mechanism having an interface for fastening the tilting system to other units/systems of the microscope. See columns 3-4 and figs. 3-4. Regarding to the base body, it is clear to one skilled in the art that any microscope has a base body for supporting the microscope. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the stereomicroscope provided by Hanzawa by rearranging the second and third reflecting elements (4, 5) into a single Porro prism element as suggested by Matsubara for the purpose of rotating the prisms at the same time without the necessary of alignment the two prisms in a rotation process.

Allowable Subject Matter

16. Claims 7 and 45/7 would be allowable if rewritten to overcome the objection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter:

The tilting system having an objective device and a set of prism elements as recited in present claim 7 is patentable with respect to the cited art, in particular, the U.S. Patent Nos. 4,643,541; 5,822,114; 4,652,094; and 5,543,962 by the limitations related to the structure of the tilting system. It is noted that while a tilting system having prisms and lenses is disclosed in the art as can be seen in each of the mentioned U.S. patents; however, the mentioned Patents do not discloses a tilting system having the following features recited in the present claim 7: First, an 180^0 prism arranged crosswise

to an extended position of the tilting system; Second, at least one deviating 90^0 prisms disposed upstream and/or downstream of the 180^0 prism; Third, the 180^0 prism and 90^0 deviating prisms rotate about two rotational axes perpendicular to the direction of light entering the tilting system; Fourth, the tilting system has two beam paths and a device formed as a lens system for adjusting the distance between the two light paths; and Fifth, the lens system is provided in at least one rotation axis about which the 180^0 prism and the at least one 90^0 deviating prism are rotated related to one another.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Q Nguyen
Primary Examiner
Art Unit 2872

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